Appl. No.

: 10/009,792

Filed

**December 13, 2001** 

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A recombinant plasmid vector which comprises:

a kanamycin resistance gene;

a promoter;

an endoxylanase signal sequence;

a nucleotide sequence coding for an oligopeptide consisting of 13 amino acids including 6 consecutive histidine residues; and,

a human granulocyte colony stimulating factor (hG-CSF) gene.

- 2. (Currently amended) The recombinant plasmid vector of claim 1, wherein the oligopeptide has an amino acid sequence of isoleucine-glutamic acid-glycine-arginine (Ile-Glu-Gly-Arg; SEQ ID NO: 28); from residue 10-13 of SEQ ID NO: 1) at the C terminus.
- 3. (Original) A recombinant plasmid vector, pTHKCSFmII represented in Figure 13 which comprises:
  - a kanamycin resistance gene;
  - a Trc promoter;
  - an endoxylanase signal sequence derived from Bacillus sp.;
  - a nucleotide sequence coding for an oligopeptide of SEQ ID NO: 1; and,
- a modified gene coding for a human granulocyte colony stimulating factor(hG-CSF), which includes a nucleotide sequence of SEQ ID NO: 26 at the N-terminus.
- 4. (Original) A microorganism, *E. coli* transformed with the plasmid vector, pTHKCSFmII of claim 3.

Appl. No. : 10/009,792

Filed: December 13, 2001

5. (Original) The microorganism of claim 4, wherein the *E. coli* is selected from the group consisting of *E. coli* XL1-Blue, *E. coli* MC4100, *E. coli* BL21 (DE3), *E. coli* HB101 and *E. coli* W3110.

- 6. (Original) E. coli MC4100/pTHKCSFmII (KCTC 0754BP) transformed with the plasmid vector, pTHKCSFmII of claim 3.
- 7. (Original) A process for preparing a human granulocyte colony stimulating factor, which comprises the steps of:

culturing *E. coli* transformed with the plasmid vector of claim 1 to obtain a human granulocyte colony stimulating factor fusion protein; and,

treating the human granulocyte colony stimulating factor fusion protein with a protease to obtain a human granulocyte colony stimulating factor.

- 8. (Original) The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the plasmid vector of claim 1 is pTHKCSFmII.
- 9. (Original) The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the human granulocyte colony stimulating factor fusion protein is obtained from the culture by employing Ni-column.
- 10. (Original) The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the protease is Factor Xa.